

PACKET SWITCH, SCHEDULING DEVICE, DROP CONTROL CIRCUIT,
MULTICAST CONTROL CIRCUIT AND OOS CONTROL DEVICE

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ABSTRACT OF THE DISCLOSURE

10 To achieve QoS control, drop control and multicast
control of a variable-length packet at high speed in
small scale hardware, a packet divider divides a
variable-length packet into fixed-length packets, and an
input buffer section stores the divided fixed-length
15 packets into queues by output lines and by QoS classes.
A large number of QoS classes are mapped into only two
kinds of classes including a guaranteed bandwidth class
for which an assigned bandwidth is guaranteed and a best
effort class for which a surplus bandwidth is allocated,
thereby to achieve scheduling at the input side by an
20 inter-line scheduler. An output buffer section assembles
a variable-length packet from fixed-length packets that
have been obtained by switching at a switch section in an
output buffer section. A QoS control is performed based
on a packet length.